

WINDOW BLIND FOR DECORATION AND SUN PROTECTION

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The invention relates to a window decoration/sun protection in the form of a horizontal or vertical slatted blind.

5 The invention also relates to a window decoration/sun protection in the form of a pleated blind, comprising an upper box and a lower beam, while between the upper box and the lower beam, in the condition ready for use, there is exclusively located a sheet-shaped material pleated in one piece.

10 The invention also relates to a window decoration/sun protection in the form of a single-layer roller blind capable of being wound up at its upper side.

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15 Accordingly, such window decorations are frequently applied in offices where computers are used. The screens of the computers prove to be properly readable only when the incident light from outside is sufficiently subdued. As it turns out, the window decorations know per se can subdue the light sufficiently for rendering a screen positioned at a workplace properly readable. However, a drawback of the known

20 window decorations is that the use of these decorations is experienced as unpleasant. Tests have shown that persons present in a space in which the windows are provided with the known window decorations will, after a passage of time, start to feel unwell, which may lead to mental and physical

25 strains.

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The object of the invention is to provide a solution to the above-outlined problem. To this end, the window decorations according to the invention are each characterized in that the window decoration, when brought into a condition

30 ready for use, comprises a first face extending in horizontal direction over at least substantially the full width of the window decoration and that the window decoration, when brought into the condition ready for use, comprises a second face extending in horizontal direction of the window

35 decoration, the first face transmitting at least

substantially no light (non-transparent or semi-transparent),  
the second face subduing the incident light such that a  
person present at his workplace in an inner space provided  
with the window decoration can still look outside through the  
5 second face, the first face being located above the second  
face.

As a person can still look outside to a certain extent  
through the second face and distinguish at least some  
contours of the outside world, he proves not to feel  
10 oppressed any longer. Also when a person stays for a longer  
period in a space provided with a window decoration according  
to the invention, it turns out that the above-mentioned  
physical and mental strains do not occur any longer.

Also, the screens still prove to be properly readable,  
15 in spite of the transmission of a certain amount of light  
through the second face. However, this is compensated for by  
the fact that the first face transmits at least substantially  
no light, so that the total light transmission of the window  
decoration is sufficiently low to enable reading the screens  
20 properly.

Preferably, it applies that the second face extends at  
least substantially over the full width of the window  
decoration. This last will be the case in particular when the  
window decoration itself is approximately as wide as a window  
25 or door in front of which the window decoration is located.

Further, it applies in particular that the first and  
second faces adjoin each other.

Also, it will generally apply that the second face  
extends down to a lower side of the window decoration.  
30 However, this is not required. Also, it generally applies  
that the first face extends up to the upper side of the  
window decoration. However, this is not required either,  
because at the upper side of the window decoration, there may  
further be present a face whose properties deviate from those  
35 of the first face.

In particular, it applies that the first and second faces each have a rectangular shape. (May be horizontal or vertical).

The invention may be applied to horizontal slatted blinds, vertical slatted blinds, roller blinds, pleated blinds, folding curtains, panel curtains, lace curtains, and the like, as will hereinafter be further explained with reference to the accompanying drawings. In these drawings:

Fig. 1 shows a first embodiment of a horizontal slatted blind and a pleated blind according to the invention when this blind is fitted at a window of an inner space in which a workplace is located;

Fig. 2a is a side elevation of the slatted blind of Fig. 1;

Fig. 2b is a side elevation of the pleated blind of Fig. 1;

Fig. 3 shows a first embodiment for a roller blind according to the invention;

Fig. 4 shows a first embodiment of a vertical slatted blind according to the invention;

Fig. 5 shows a second embodiment of a vertical slatted blind according to the invention;

Fig. 6 shows a second embodiment of a roller blind according to the invention; and

Fig. 7 shows a second embodiment of a horizontal slatted blind and a pleated blind according to the invention.

In Fig. 1, reference numeral 1 designates a window decoration/sun protection in the form of a horizontal slatted blind according to the invention. The slatted blind 1 is mounted on a wall 2 of an inner space 4 containing a workplace 6 with a picture screen 8.

In this example, the horizontal slatted blind is in use, i.e. the horizontal slatted blind is in its expanded condition. Fig. 2a is a side elevation of the slatted blind.

The slatted blind comprises horizontal slats 10, attached in a manner known per se to a horizontal upper box,

known per se. Located in the upper box 12 is a mechanism for hoisting and folding-in the window decoration by means of a hoist cord 18. A number of these slats 10.1 of a first type form a face whose width is indicated by an arrow B in the drawing and whose height is indicated by an arrow I in the drawing. Further, a number of slats 10.2 of a second type form a second face whose width is again indicated by the arrow B in the drawing and whose height is indicated by an arrow II in the drawing.

In this example, the slats 10.1 of the first type are designed so as to transmit at least substantially no light. Further, the slats 10.2 of the second type are of such design that they transmit incident light from outside in subdued form. For this purpose, the slats 10.2 of the second type are perforated in a manner known per se and each comprise a large number of small apertures.

As a result, in the apparatus according to Fig. 1, the window decoration, when brought into a condition ready for use, comprises a first face (B, I) extending in horizontal direction over at least substantially the full width and in this example even over the entire width of the window decoration, and the window decoration in this condition comprises a second face (B, II) extending in horizontal direction of the window decoration, the first face transmitting at least substantially no light, the second face subduing the incident light such that the person present in an inner space at his workplace can still look outside through the second face, the first face being located above the second face.

In this example, it also applies that the second face (B, II) extends over at least substantially the full width of the window decoration and in this example even over the entire width. Further, in this case, it applies that the first and the second face adjoin each other. Moreover, the second face extends down to the lower side 14 of the window decoration. In turn, the first face extends up to an upper

side 16 of the window decoration. In this example, it also applies that the first face (B, I) is higher than the second face (B, II).

The slats 10.1 of the first type can, for instance, be of aluminum, plastic or wooden design. It also applies that the slats of the second type 10.2 may be constructed of the same materials. It is also possible that the slats of the second type 10.2 are manufactured from transparent plastic, in which case perforation is not necessary.

In the situation as shown in Fig. 1, a person who is present at the workplace 6 and wishes to read the screen 8, will be able to do so in a proper manner. Due to a combination of the first face, transmitting no light, with the second face which does actually transmit a portion of the light from outside, the total amount of incident light is sufficiently subdued to provide that the screen 8 remains properly readable. At the same time, a person present at the workplace 6 is still able to look outside through the second face (B, II) and distinguish at least some contours of the outside world. In this example, a number of trees 20 are vaguely visible.

If the window decoration is designed as a pleated blind, comprising a sheet-shaped material pleated in one piece, its appearance will be comparable to Fig. 1. This window decoration comprises an upper box 12 and a lower beam 21, while between the upper box 12 and the lower beam 21, in the (expanded) condition ready for use, there is exclusively located a sheet-shaped material pleated in one piece. However, this material, pleated in one piece, may be built up from different sheets of material. The first face is then formed by a pleated, sheet-shaped material 22 which transmits at least substantially no light (non-transparent or semi-transparent; see Fig. 2b). The second face is formed by a pleated, sheet-shaped material 24 which transmits incident light at least partially. The sheet-shaped first material 22 may, for instance, consist of a cloth having a coating of

aluminum applied thereto by vaporization. The same holds for the second pleated sheet-shaped material 24, in which, however, a perforation has moreover been provided in the sheet-shaped material, so that a person present at the workplace can still look outside to some extent. The second pleated sheet-shaped material may also consist of a transparent cloth. The first and second sheet-shaped materials are directly interconnected and constitute the sheet-shaped material pleated in one piece, in other words: without intermediate beam between the first and second sheet-shaped materials 22, 24 and the like. The connection may consist of a layer of adhesive 25.

Fig. 3 shows a second possible embodiment of a window decoration according to the invention. Here, corresponding parts have been provided with the same reference numerals.

In the window decoration according to Fig. 3, the window decoration is designed as a single-layer roller blind of the type which can be wound up on a roll 12 at the upper side 16. In this window decoration, the first face (B, I) is formed by a cloth 26 of the roller blind, which cloth 26 transmits at least substantially no light. The second face (B, II) of the roller blind is formed by a second cloth 28 of the roller blind, which second cloth transmits incident light partially. The first cloth can again consist, for instance, of textile with a plasticized rear side. It may also consist of entirely plasticized cloth and textile having an aluminum coating applied thereto by vaporization.

The second cloth 28 may, for instance, consist of gauze, dark-colored transparent plastic, transparent cloth, textile having an aluminum coating that has been perforated, etc. The first and second cloths can again be attached to each other by means of adhesive 25 and together form a single layer which can be wound onto the roll 12 for opening the roller blind.

Fig. 4 shows a fourth variant of the window decoration according to the invention. Parts corresponding to those of

the preceding Figures have been provided with the same reference numerals. In the window decoration according to Fig. 4, it applies that it is designed as a vertical slatted blind. The first face (B, I) and the second face (B, II) are each formed by the same vertical slats 30.

Further, it applies to each of these slats that they transmit at least substantially no light for a first portion 32 of the slats located in the first face (B, I) and that these slats comprise a second portion 34 which partially transmits the light, said second portion forming part of the second face (B, II). The above can for instance be realized by manufacturing the slats 30 from aluminum and/or plastic (PVC), while only the lower sides of the slats, i.e. the portion 34 of each of the slats, is perforated. Other variants are slats which are each manufactured from colored, transparent plastic which partially transmits incident light, while it moreover applies that the first portion 32 of each of the slats is provided with a coating that transmits at least substantially no light. Accordingly, the effect is again that the first face (B, I) extends in horizontal direction over the full width of the window decoration and transmits at least substantially no light, and that the second face (B, II) likewise extends in horizontal direction, in this case even over the entire width of the window decoration, the second face subduing the incident light in such a manner that the person present at his workplace in the inner space can still look outside through the second face, the first face being located above the second face.

Fig. 5 shows a window decoration which at least substantially corresponds to the window decoration of Fig. 4. In this case, however, the slats are of longer design, to form a third face (B, III). This third face (B, III) can, for instance, have the same properties as the second face (B, II). Each slat 30 then comprises a third portion 34 having the same properties as the portion 32 of the relevant slat. However, it is also possible that the third face (B, III) has

the same properties as the first face (B, I). Each slat 30 then comprises a third portion 36 having the same properties as the portion 22 of the relevant slat. The face (B, III) can, for instance, be located below the window sill and need not be especially partially light-transmitting for creating the possibility of looking outside therethrough. Also if the window extended down to the floor 40, the third face (B, III) may be designed for transmitting no light. Indeed, a person present at his workplace can always look outside to some extent via the second face (B, II). Of course, the third face (B, III) may also have properties regarding light transmission that differ from those of the first and second faces (B, I) and (B, II).

Fig. 6 shows the roller blind according to Fig. 3, with the understanding that it is likewise enlarged by a face (B, III) having the same properties as discussed in relation to Fig. 5. Hence, the face (B, III) may be manufactured from the same cloth as the cloth from which the face (B, II) is manufactured. It is also possible that the face (B, III) is manufactured from the same cloth as the cloth of the face (B, I). Where they adjoin each other, the different cloths used can readily be glued together. Such variants are each understood to fall within the framework of the invention.

Also to the window decoration according to Fig. 1 (relating both to a horizontal blind and to a pleated blind), it applies that it may further be provided with a third face (B, III), see Fig. 7. In the case where a horizontal blind is concerned, the horizontal slats located in the face (B, III) may be identical to the horizontal slats located in the face B, II or to the horizontal slats located in the face B, I. Such variants also fall within the framework of the invention. When the apparatus according to Fig. 7 forms a pleated blind, the material from which the pleated blind is formed in the face (B, III) may correspond to the material of the pleated blind in the face (B, II) or in the face (B, I)



or be of further deviating material. Such variants fall within the framework of the invention as well.

In the foregoing, the first face and the first face are each of rectangular design. However, it is also conceivable that, for instance, the second face has a shape differing from the rectangle. It is also possible that the vertical slatted blind (Figs. 4, 5) is on one or either side enlarged with additional slats which are entirely or partially transparent and/or non-transparent. The slats may, for instance, be suspended beyond a window in front of a wall and, for instance, exclusively have a decorative function. It is also possible that two or more vertical slatted blinds according to the invention are fitted on one horizontal rail or box 12, for instance for suspending in front of two or more windows. Before an interspace between the windows, additional slats may then be suspended from the horizontal rail or box 12. These additional slats may again be entirely or partially transparent and/or non-transparent and form again additional window decorations.

In the embodiments outlined hereinabove, the first face (B, I) extends at least substantially over the full width of the window decoration.

Of course, the horizontal blinds (Figs. 1, 2a, 7), pleated blinds (Figs. 1, 2b) or roller blind (Fig. 6) may also be one-sidedly or two-sidedly widened utilizing additionally longer slats or additionally wider, sheet-shaped material. The widened parts may then have properties similar to or different from those of the material of the faces (B, I), (B, II) or (B, III) and constitute additional window decorations. Such variants are each understood to fall within the framework of the invention.